# OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **POST POND**, the program coordinators recommend the following actions. Observations are based on a limited data set of only one test per summer. Isolated weather or watershed events could affect yearly data and, therefore, the accuracy of trend analysis.

#### FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a fairly stable in-lake chlorophyll-a trend, although concentrations have decreased over the past three years. May chlorophyll concentrations were lower than last season's concentration. Spring rain did not cause any excess algae growth in Post Pond, and concentrations were well below the NH mean reference line. The mix of phytoplankton is common to many lakes and ponds in New Hampshire. While algae are present in all lakes, an excess amount of any type is not welcomed. Concentrations can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.
- ➤ Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *stable* trend in lake transparency. The 2000 sampling season was considered to be wet and, therefore, average transparency readings are expected to be slightly lower than last year's readings. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity.
- ➤ Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the lower layer); the inset graphs show current year data. Phosphorus is the limiting nutrient for plants and algae in New Hampshire waters.

Too much phosphorus in a lake can lead to increases in plant growth over time. These graphs show a fairly stable, but slightly improving, trend for in-lake phosphorus levels. Phosphorus concentrations have decreased slightly since VLAP monitoring began in 1990. Mean phosphorus concentrations have remained below the NH average for quite a few years now, and we would like to see this trend continue for Post Pond. By adding additional sampling events later in the summer we will be able to document the changes in phosphorus concentration as the summer progresses. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

#### **OTHER COMMENTS**

- ➤ Dissolved oxygen was high at all depths of the lake (Table 9) this year. As stratified lakes age, oxygen is depleted in the lower layer by the process of decomposition. The lack of this aging indicator is a sign of the lake's overall health, however we recommend scheduling a lake visit with the VLAP coordinator in August so that we can see if oxygen is depleted later in the summer.
- Please note in May this summer phosphorus levels were found to be less than 5 μg/L in Clay Brook Outlet. The NHDES Laboratory Services adopted a new method of analyzing total phosphorus this year and the lowest value that can be recorded is 'less than 5 μg/L'. If this caused an increase in the average phosphorus for either of the layers we would like to remind the association that a reading of 5 μg/L is still considered low for New Hampshire's waters.
- ➤ Conductivity in Pinnacle Inlet decreased again this year although results are still high (Table 6). We continue to recommend increased testing sites along the inlet as a way to bracket the stream for conductivity, and testing for specific metals. If you would like to conduct these extra tests please contact the VLAP coordinator at 271-2658 so that extra bottles can be brought for the sampling session and so we can help select the additional sites.
- ➤ *E. coli* samples were collected at two sites, and the results were well below the state standard of 406 counts per 100 mL for Class B surface waters (Table 12). Volunteers expressed their concern about the large number of geese on the pond this year. Although bacteria concentrations were not elevated in May, there is the possibility that the geese could raise *E. coli* levels in the pond. Residents are urged not to feed the geese, as that will only make the problem worse. Another method that has been effective in keeping geese from

overpopulating waterbodies is planting shoreline vegetation at the eye level of the birds. Geese like to have a clear view of the water from the shore. Please consult the spring edition of The Sampler for more ideas. If this continues to be a nuisance and you are further concerned about the impact on bacteria concentrations in the pond, please contact the VLAP coordinator at 271-2658. Bacteria bottles can either be picked up from the Limnology Center, or we can mail the bottles to you.

#### **NOTES**

Monitor's Note (5/30/00): 6 Canadian geese with young. 1 Loon. Garden hose and phone wire going under culvert in Pinnacle Inlet and going to the trailer.

#### **USEFUL RESOURCES**

Stormwater Management and Erosion and Sediment Control Handbook. NHDES, Rockingham County Conservation District, USDA Natural Resource Conservation Service, 1992. (603) 679-2790.

Water Sampling Protocol for E. coli Testing, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Bacteria in Surface Waters, WD-BB-14, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Answers to Common Lake Questions, NHDES-WSPCD-92-12, NHDES Booklet, (603) 271-3503.

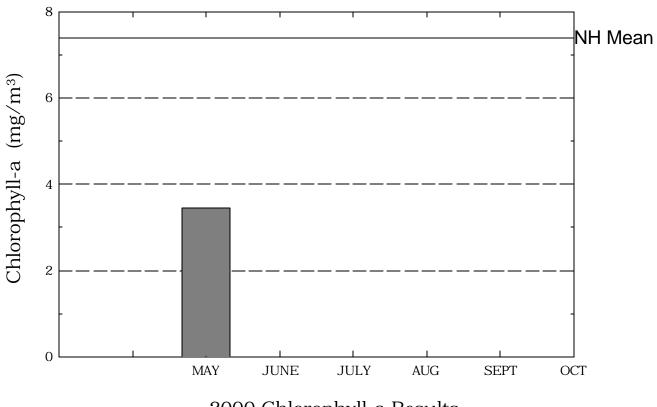
Nonpoint Source Pollution and Stormwater Fact Sheet Package. Terrene Institute. (800) 726-5253, or www.terrene.org

Diet for a Small Lake: A New Yorker's Guide to Lake Management. Federation of Lake Associations, Cazenovia, NY, 1990. (800) 796-FOLA, or <a href="https://www.nysfola.org">www.nysfola.org</a>

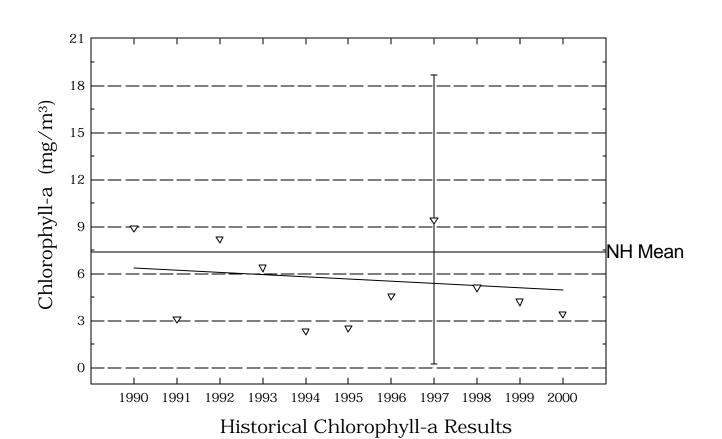
Road Salt and Water Quality, WD-WSQB-7, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

## Post Pond

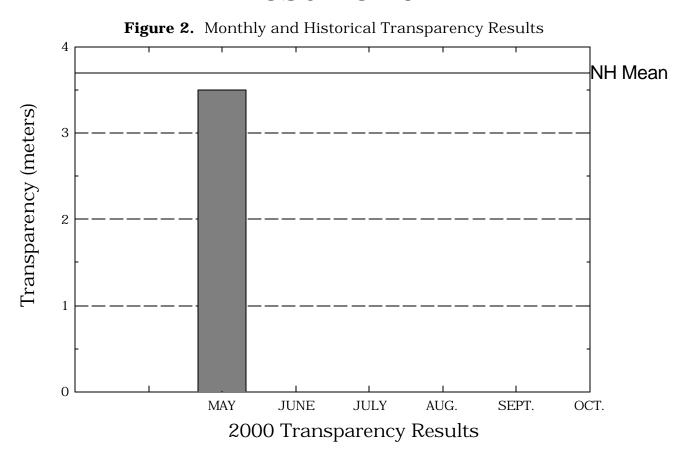
Figure 1. Monthly and Historical Chlorophyll-a Results

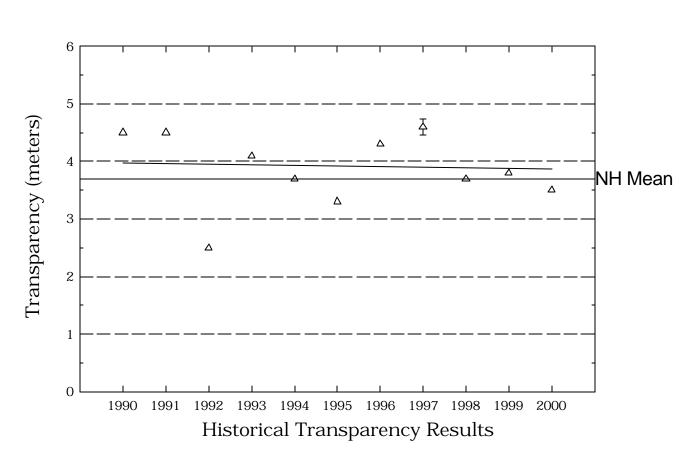


2000 Chlorophyll-a Results



## Post Pond





## Post Pond

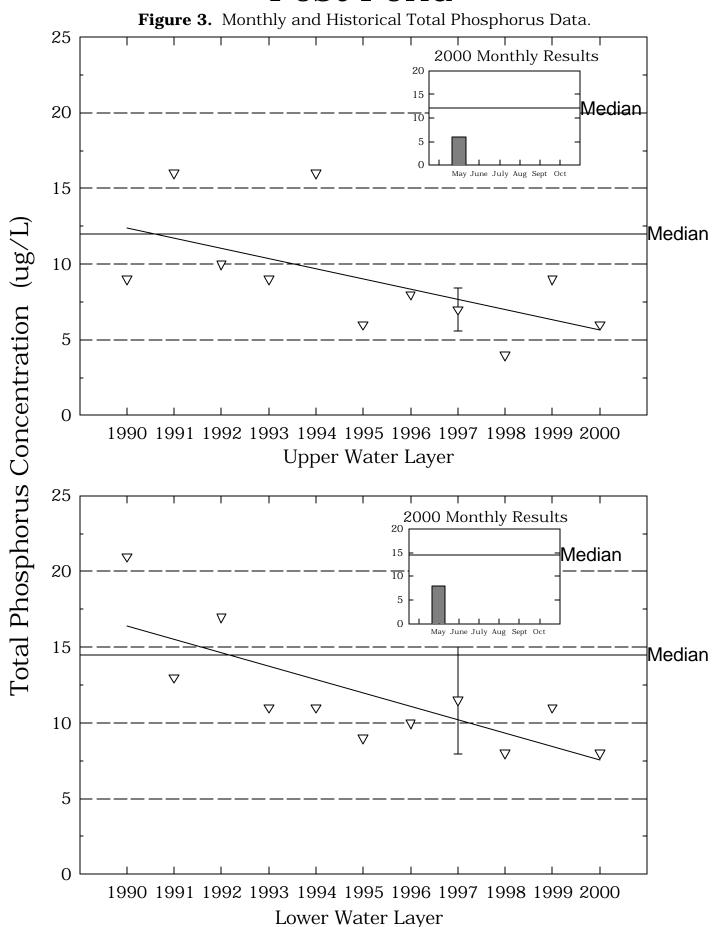


Table 1.

POST POND

LYME

## Chlorophyll-a results (mg/m $\,$ ) for current year and historical sampling periods.

Year	Minimum	Maximum	Mean
1990	8.92	8.92	8.92
1991	3.11	3.11	3.11
1992	8.20	8.20	8.20
1993	6.40	6.40	6.40
1994	2.37	2.37	2.37
1995	2.56	2.56	2.56
1996	4.60	4.60	4.60
1997	2.94	15.96	9.45
1998	5.12	5.12	5.12
1999	4.24	4.24	4.24
2000	3.46	3.46	3.46

#### Table 2.

#### POST POND

#### LYME

#### Phytoplankton species and relative percent abundance.

#### Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
09/18/1990	CHRYSOSPHAERELLA	54
03/ 10/ 1330	SYNURA	22
	STIVOWY	₩₩
06/26/1991	DINOBRYON	51
	DIATOM	24
	ASTERIONELLA	12
05/13/1992	DINOBRYON	85
05/12/1993	DINOBRYON	60
	ASTERIONELLA	25 10
	RHIZOSOLENIA	10
05/31/1994	RHIZOSOLENIA	77
	MOUGEOTIA	22
05/11/1995	MELOSIRA	51
03/11/1933	DINOBRYON	26
	ASTERIONELLA	13
06/18/1996	RHIZOSOLENIA	41
	DINOBRYON	29
	SYNURA	15
06/26/1997	DINOBRYON	70
	ASTERIONELLA	22
	MELOSIRA	3
07/30/1997	TABELLARIA	30
	DINOBRYON	30
	CERATIUM	13
05/27/1998	DINOBRYON	71
	TABELLARIA	15
	MELOSIRA	6
05/26/1999	RHIZOSOLENIA	38
	DINOBRYON	36
	ASTERIONELLA	5

#### Table 2.

#### POST POND

#### LYME

#### Phytoplankton species and relative percent abundance.

#### Summary for current and historical sampling seasons.

D + CC   1		Relative %
Date of Sample	Species Observed	Abundance
05/30/2000	DINOBRYON	55
	ASTERIONELLA	24
	RHIZOSOLENIA	7

#### Table 3.

#### POST POND

#### LYME

## Summary of current and historical Secchi Disk transparency results (in meters).

Year	Minimum	Maximum	Mean
1990	4.5	4.5	4.5
1991	4.5	4.5	4.5
1992	2.5	2.5	2.5
1993	4.1	4.1	4.1
1994	3.7	3.7	3.7
1995	3.3	3.3	3.3
1996	4.3	4.3	4.3
1997	4.5	4.7	4.6
1998	3.7	3.7	3.7
1999	3.8	3.8	3.8
2000	3.5	3.5	3.5

Table 4.

POST POND

LYME

## pH summary for current and historical sampling seasons. Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
CLAY BROOK OUTLET				
	1990	6.89	6.89	6.89
	1992	7.31	7.31	7.31
	1993	7.17	7.17	7.17
	1994	7.13	7.13	7.13
	1995	7.58	7.58	7.58
	1996	7.16	7.16	7.16
	1997	7.11	7.11	7.11
	1998	7.47	7.47	7.47
	1999	7.08	7.08	7.08
	2000	7.26	7.26	7.26
EPILIMNION				
	1990	7.69	7.69	7.69
	1991	7.80	7.80	7.80
	1992	7.53	7.53	7.53
	1993	7.59	7.59	7.59
	1994	7.41	7.41	7.41
	1995	7.53	7.53	7.53
	1996	6.98	6.98	6.98
	1997	7.55	7.65	7.60
	1998	7.65	7.65	7.65
	1999	7.37	7.37	7.37
	2000	7.22	7.22	7.22
HYPOLIMNION				
	1990	6.62	6.62	6.62
	1992	6.66	6.66	6.66
	1993	7.02	7.02	7.02

Table 4.

POST POND

LYME

## pH summary for current and historical sampling seasons. Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1994	6.69	6.69	6.69
	1995	6.97	6.97	6.97
	1996	6.58	6.58	6.58
	1997	6.34	6.34	6.34
	1998	6.67	6.67	6.67
	1999	6.71	6.71	6.71
	2000	6.80	6.80	6.80
LAUNCH BK				
	1992	7.41	7.41	7.41
	1993	7.60	7.60	7.60
	1994	6.87	6.87	6.87
	1995	7.22	7.22	7.22
	1996	7.05	7.05	7.05
	1997	7.72	7.72	7.72
METALIMNION				
	1990	6.72	6.72	6.72
	1992	7.27	7.27	7.27
	1993	7.50	7.50	7.50
	1994	7.46	7.46	7.46
	1995	7.49	7.49	7.49
	1996	6.56	6.56	6.56
	1997	7.18	7.34	7.25
	1998	7.37	7.37	7.37
	1999	7.33	7.33	7.33
	2000	7.05	7.05	7.05

Table 4.

POST POND

LYME

## pH summary for current and historical sampling seasons. Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
PINNACLE INLET				
	1998	7.77	7.77	7.77
	1999	7.41	7.41	7.41
	2000	7.21	7.21	7.21
PINNACLE UPSTREAM				
	1996	7.34	7.34	7.34
	1998	7.71	7.71	7.71
	1999	7.51	7.51	7.51
TROUT BROOK				
	1992	7.16	7.16	7.16
	1993	7.49	7.49	7.49
	1994	7.28	7.28	7.28
	1995	7.37	7.37	7.37
	1996	7.15	7.15	7.15
	1997	7.51	7.51	7.51
	1998	7.35	7.35	7.35
	1999	7.38	7.38	7.38
	2000	7.20	7.20	7.20
WEST ROCKS				
	2000	7.34	7.34	7.34
WETLAND				
	1994	7.19	7.19	7.19

Table 5.

#### POST POND

#### LYME

## Summary of current and historical Acid Neutralizing Capacity. Values expressed in mg/L as CaCO .

#### **Epilimnetic Values**

Year	Minimum	Maximum	Mean
1990	18.60	18.60	18.60
1991	15.00	15.00	15.00
1992	14.20	14.20	14.20
1993	17.30	17.30	17.30
1994	11.90	11.90	11.90
1995	15.70	15.70	15.70
1996	14.80	14.80	14.80
1997	17.00	20.10	18.55
1998	16.20	16.20	16.20
1999	18.50	18.50	18.50
2000	15.10	15.10	15.10

Table 6.

POST POND

LYME

Station	Year	Minimum	Maximum	Mean
CLAY BROOK OUTLET				
	1990	98.7	98.7	98.7
	1991	84.7	84.7	84.7
	1992	74.6	74.6	74.6
	1993	81.3	81.3	81.3
	1994	79.4	79.4	79.4
	1996	76.2	76.2	76.2
	1997	74.0	74.0	74.0
	1998	71.1	71.1	71.1
	1999	75.8	75.8	75.8
	2000	70.1	70.1	70.1
EPILIMNION				
	1990	71.6	71.6	71.6
	1991	79.9	79.9	79.9
	1992	73.3	73.3	73.3
	1993	76.3	76.3	76.3
	1994	74.4	74.4	74.4
	1995	82.3	82.3	82.3
	1996	75.8	75.8	75.8
	1997	73.3	75.1	74.2
	1998	69.9	69.9	69.9
	1999	71.2	71.2	71.2
	2000	69.8	69.8	69.8
HYPOLIMNION				
	1990	90.1	90.1	90.1
	1991	77.3	77.3	77.3
	1992	95.3	95.3	95.3

Table 6. POST POND LYME

Station	Year	Minimum	Maximum	Mean
	1993	81.3	81.3	81.3
	1994	84.5	84.5	84.5
	1995	81.5	81.5	81.5
	1996	84.9	84.9	84.9
	1997	71.4	73.2	72.3
	1998	70.9	70.9	70.9
	1999	71.7	71.7	71.7
	2000	75.1	75.1	75.1
LAUNCH BK				
	1992	235.3	235.3	235.3
	1993	255.0	255.0	255.0
	1994	131.8	131.8	131.8
	1995	86.8	86.8	86.8
	1996	228.0	228.0	228.0
	1997	258.0	258.0	258.0
MARSH INLET				
	1991	88.5	88.5	88.5
METALIMNION				
	1990	78.8	78.8	78.8
	1991	73.8	73.8	73.8
	1992	71.9	71.9	71.9
	1993	75.8	75.8	75.8
	1994	73.9	73.9	73.9
	1995	82.0	82.0	82.0
	1996	70.4	70.4	70.4
	1997	65.7	68.6	67.1
	1998	67.4	67.4	67.4

#### Table 6.

#### POST POND LYME

Station	Year	Minimum	Maximum	Mean
	1999	71.2	71.2	71.2
	2000	67.3	67.3	67.3
PINNACLE INLET				
	1998	319.0	319.0	319.0
	1999	307.0	307.0	307.0
	2000	203.0	203.0	203.0
PINNACLE UPSTREAM				
	1996	277.0	277.0	277.0
	1998	297.4	297.4	297.4
	1999	252.9	252.9	252.9
TROUT BROOK				
	1991	351.1	351.1	351.1
	1992	284.9	284.9	284.9
	1993	63.4	63.4	63.4
	1994	66.2	66.2	66.2
	1995	66.5	66.5	66.5
	1996	69.9	69.9	69.9
	1997	78.8	78.8	78.8
	1998	73.6	73.6	73.6
	1999	62.7	62.7	62.7
	2000	62.0	62.0	62.0
WEST ROCKS				
	2000	73.3	73.3	73.3
WETLAND				
	1994	111.5	111.5	111.5

Table 6.

POST POND

LYME

Station	Year	Minimum	Maximum	Mean
CLAY BROOK OUTLET				
	1990	98.7	98.7	98.7
	1991	84.7	84.7	84.7
	1992	74.6	74.6	74.6
	1993	81.3	81.3	81.3
	1994	79.4	79.4	79.4
	1996	76.2	76.2	76.2
	1997	74.0	74.0	74.0
	1998	71.1	71.1	71.1
	1999	75.8	75.8	75.8
	2000	70.1	70.1	70.1
EPILIMNION				
	1990	71.6	71.6	71.6
	1991	79.9	79.9	79.9
	1992	73.3	73.3	73.3
	1993	76.3	76.3	76.3
	1994	74.4	74.4	74.4
	1995	82.3	82.3	82.3
	1996	75.8	75.8	75.8
	1997	73.3	75.1	74.2
	1998	69.9	69.9	69.9
	1999	71.2	71.2	71.2
	2000	69.8	69.8	69.8
HYPOLIMNION				
	1990	90.1	90.1	90.1
	1991	77.3	77.3	77.3
	1992	95.3	95.3	95.3

Table 6. POST POND LYME

Station	Year	Minimum	Maximum	Mean
	1993	81.3	81.3	81.3
	1994	84.5	84.5	84.5
	1995	81.5	81.5	81.5
	1996	84.9	84.9	84.9
	1997	71.4	73.2	72.3
	1998	70.9	70.9	70.9
	1999	71.7	71.7	71.7
	2000	75.1	75.1	75.1
LAUNCH BK				
	1992	235.3	235.3	235.3
	1993	255.0	255.0	255.0
	1994	131.8	131.8	131.8
	1995	86.8	86.8	86.8
	1996	228.0	228.0	228.0
	1997	258.0	258.0	258.0
MARSH INLET				
	1991	88.5	88.5	88.5
METALIMNION				
	1990	78.8	78.8	78.8
	1991	73.8	73.8	73.8
	1992	71.9	71.9	71.9
	1993	75.8	75.8	75.8
	1994	73.9	73.9	73.9
	1995	82.0	82.0	82.0
	1996	70.4	70.4	70.4
	1997	65.7	68.6	67.1
	1998	67.4	67.4	67.4

#### Table 6.

#### POST POND LYME

Station	Year	Minimum	Maximum	Mean
	1999	71.2	71.2	71.2
	2000	67.3	67.3	67.3
PINNACLE INLET				
	1998	319.0	319.0	319.0
	1999	307.0	307.0	307.0
	2000	203.0	203.0	203.0
PINNACLE UPSTREAM				
	1996	277.0	277.0	277.0
	1998	297.4	297.4	297.4
	1999	252.9	252.9	252.9
TROUT BROOK				
	1991	351.1	351.1	351.1
	1992	284.9	284.9	284.9
	1993	63.4	63.4	63.4
	1994	66.2	66.2	66.2
	1995	66.5	66.5	66.5
	1996	69.9	69.9	69.9
	1997	78.8	78.8	78.8
	1998	73.6	73.6	73.6
	1999	62.7	62.7	62.7
	2000	62.0	62.0	62.0
WEST ROCKS				
	2000	73.3	73.3	73.3
WETLAND				
	1994	111.5	111.5	111.5

## Table 8. POST POND

**LYME** 

Station	Year	Minimum	Maximum	Mean
CLAY BROOK OUTLET				
	1990	12	12	12
	1991	17	17	17
	1992	11	11	11
	1993	18	18	18
	1994	13	13	13
	1995	8	8	8
	1996	18	18	18
	1997	13	13	13
	1998	5	5	5
	1999	6	6	6
	2000	< 5	5	5
EPILIMNION				
	1990	9	9	9
	1991	16	16	16
	1992	10	10	10
	1993	9	9	9
	1994	16	16	16
	1995	6	6	6
	1996	8	8	8
	1997	6	8	7
	1998	4	4	4
	1999	9	9	9
	2000	6	6	6
HYPOLIMNION				
	1990	21	21	21
	1991	13	13	13

## Table 8. POST POND LYME

Station	Year	Minimum	Maximum	Mean
	1992	17	17	17
	1993	11	11	11
	1994	11	11	11
	1995	9	9	9
	1996	10	10	10
	1997	9	14	11
	1998	8	8	8
	1999	11	11	11
	2000	8	8	8
LAUNCH BK				
	1992	8	8	8
	1993	7	7	7
	1994	46	46	46
	1995	33	33	33
	1996	74	74	74
	1997	10	10	10
MARSH INLET				
	1991	13	13	13
METALIMNION				
	1990	7	7	7
	1991	12	12	12
	1992	17	17	17
	1993	10	10	10
	1994	13	13	13
	1995	6	6	6
	1996	11	11	11
	1997	9	10	9

## Table 8. POST POND

**LYME** 

Station	Year	Minimum	Maximum	Mean
	1998	8	8	8
	1999	10	10	10
	2000	8	8	8
PINNACLE BY SHED				
	1997	14	14	14
PINNACLE INLET				
	1998	14	14	14
	1999	12	12	12
	2000	9	9	9
PINNACLE UPSTREAM				
	1995	6	6	6
	1996	14	14	14
	1998	14	14	14
TROUT BROOK				
	1991	28	28	28
	1992	51	51	51
	1993	6	6	6
	1994	4	4	4
	1995	5	5	5
	1996	17	17	17
	1997	7	7	7
	1998	4	4	4
	1999	7	7	7
	2000	5	5	5
WEST ROCKS				
	2000	0	0	0

#### Table 8.

#### POST POND

#### **LYME**

Station	Year	Minimum	Maximum	Mean
WETLAND				
	1994	30	30	30

## Table 9. POST POND LYME

#### Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation
		May 30, 2000	
0.1	16.0	9.3	94.2
1.0	15.2	9.5	94.3
2.0	14.8	9.3	91.4
3.0	13.7	9.2	89.0
4.0	11.8	9.6	88.2
5.0	10.1	9.1	81.2
6.0	8.5	8.6	73.9
7.0	7.9	8.2	69.4
8.0	7.4	7.5	62.4
9.0	7.1	7.0	58.0
10.0	6.9	6.5	53.6
11.0	6.7	5.1	42.1

Table 10.

POST POND

LYME

#### Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen  (mg/L)	Saturation
September 18, 1990	10.0	6.0	0.9	7.2
June 26, 1991	10.5	5.5	0.2	1.6
May 13, 1992	11.0	5.0	0.8	6.2
May 12, 1993	11.0	5.8	4.1	32.0
May 31, 1994	11.0	4.3	3.2	24.0
May 11, 1995	11.0	5.0	6.6	51.0
June 18, 1996	11.0	6.0	0.6	5.0
June 26, 1997	10.5	5.8	0.7	5.0
July 30, 1997	10.0	6.0	0.5	4.0
May 27, 1998	11.0	5.2	4.7	36.0
May 26, 1999	11.0	7.5	0.2	2.0
May 30, 2000	11.0	6.7	5.1	42.1

## Table 11. POST POND LYME

## Summary of current year and historic turbidity sampling. Results in NTU's.

Station	Year	Minimum	Maximum	Mean
CLAY BROOK OUTLET				
	1997	1.7	1.7	1.7
	1998	0.5	0.5	0.5
	1999	0.7	0.7	0.7
	2000	0.7	0.7	0.7
EPILIMNION				
	1997	0.4	0.4	0.4
	1998	0.5	0.5	0.5
	1999	0.5	0.5	0.5
	2000	0.4	0.4	0.4
HYPOLIMNION				
	1997	1.0	1.0	1.0
	1998	1.2	1.2	1.2
	1999	1.3	1.3	1.3
	2000	0.7	0.7	0.7
LAUNCH BK				
	1997	0.3	0.3	0.3
METALIMNION				
	1997	0.5	0.5	0.5
	1998	1.1	1.1	1.1
	1999	0.9	0.9	0.9
	2000	0.5	0.5	0.5
PINNACLE INLET				
	1998	1.1	1.1	1.1
	1999	0.6	0.6	0.6
	2000	0.6	0.6	0.6
PINNACLE UPSTREAM				

Table 11.

POST POND

LYME

## Summary of current year and historic turbidity sampling. Results in NTU's.

Station	Year	Minimum	Maximum	Mean
	1998	2.4	2.4	2.4
	1999	1.0	1.0	1.0
TROUT BROOK				
	1997	0.5	0.5	0.5
	1998	1.5	1.5	1.5
	1999	0.5	0.5	0.5
	2000	0.2	0.2	0.2
WEST ROCKS				
	2000	0.4	0.4	0.4

#### Table 12.

#### POST POND

#### LYME

### Summary of current year bacteria sampling. Results in counts per 100ml.

Location	Date	E. Coli
		See Note Below
BEACH WITH GEESE		
	May 30	1
PINNACLE INLET		
	May 30	4